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The Evolution and Diversification of the Lypopods

The lycopods, a diverse and ancient group of pteridophytes, form a major lineage of vascular plants. This lineage includes three orders, Lycopodiales, Selaginellales, and Isoetales. Each order contains a single extant family, but the group has a long and diverse fossil record beginning in the Devonian or possibly late Silurian. This fossil record is replete with many curious forms that have long captured the interest and imagination of those interested in plant evolution. Although lycopods have attracted the attention of paleobotanists and morphologists for many years, it is only within the last few years that systematists have initiated studies to critically evaluate taxa and their modes of speciation. While there is agreement that the lycopods form a clade distinct from all other vascular plants, there is some argument in the interpretation of the diversity and evolution within the lycopod lineage. This is an exciting time for systematic biologists. We are beginning to uncover, discover, and explore the modes and mechanisms of divergent and reticulate evolution in the lycopods, revealing their incredibly long history and amazing diversity.

The following five papers are facsimiles of oral presentations given on 4 August 1999, in a symposium entitled "The Evolution and Diversification of the Lycopods." This symposium, a part of the XVI International Botanical Congress held in St. Louis, Missouri, brought leading researchers together to present their current findings relevant to the phylogeny of the lycopods. Niklas Wikström, Léa Grauvogel-Stamm, and Carl Taylor organized the symposium.

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